

C280.01/I

Claims

1. A receiver medium for digital imaging, comprising a substrate having a dye-receiving surface bearing a coating comprising a highly branched functionalised polymer of generally globular form dispersed in a host polymer, wherein the host polymer has a Tg of <50°C.
2. A receiver medium according to claim 1, wherein at least some of the end groups of the highly branched polymer carrying functional groups selected from OH, NH₂, NHR, NR₂, COOH, CONH₂, NHCOR, CONHR, SO₂NH₂, SO₂NHR, SO₃H, NHCONH₂, NHCONHR, =NOH and PO₃H, in which R is selected from CH, NO₂, Cl, F, Br, C₁₋₆alkyl, C₁₋₆alkoxy, NHCOC₁₋₆alkyl, NHCOPhenyl, NSO₂alkyl, NSO₂phenyl and aryloxy, and preferably from the groups having at least one H atom.
3. A receiver medium according to claim 1 or 2, wherein at least 50%, preferably at least 70%, of the end groups of the highly branched polymer carry functional groups.
4. A receiver medium according to any one of the preceding claims, wherein the highly branched polymer has a molecular weight of at least 1000.
5. A receiver medium according to any one of the preceding claims, wherein the radius of gyration of the highly branched polymer is in the range 2 to 10nm.
6. A receiver medium according to any one of the preceding claims, wherein the host polymer is selected from polymers including polyesters, ~~acrylic~~ polymers, vinyl polymers, poly(vinyl pyridine), vinyl pyrrolidone/vinyl acetate, vinyl chloride/vinyl acetate copolymers, and cellulosic polymers.
7. A receiver medium according to any one of the preceding claims, when the highly branched polymer is present in an amount in the range 10 to 90%, preferably 20 to 60%, by weight of the coating.

8. A receiver medium according to any one of the preceding claims, wherein the substrate is in the form of a film or sheet of material.

9. A receiver medium according to any one of the preceding claims, wherein the substrate is pre-treated prior to application of the coating.

10. A receiver medium according to any one of the preceding claims, wherein the coating has a thickness in the range 1 μ m to 100 μ m, preferably 50 μ m or less, especially in the range from 2 μ m to 10 μ m, for media for use in thermal dye transfer printing and in the range 10 μ m to 50 μ m for media for use in ink jet printing

11. A receiver medium according to any one of the preceding claims, wherein the coating includes particulate filler material.

12. A receiver medium according to any one of the preceding claims, including a top coat over the coating.

13. A receiver medium according to any one of the preceding claims, including one or more back coats on the side of the substrate remote from the dye-receiving surface.

14. A method of making a receiver medium, comprising applying to a dye-receiving surface of a substrate a coating comprising a highly branched functionalised polymer of generally globular form dispersed in a host polymer, wherein the host polymer has a Tg <50°C.

15. A method of printing, comprising applying dye to the dye-receiving surface of receiver medium in accordance with any one of claims 1 to 13 by a digital imaging technique.

16. A digital imaging receiver medium/dye combination in which the receiver medium comprises a substrate having a dye-receiving surface bearing a coating comprising a highly branched functionalised polymer of generally globular form dispersed in a host polymer having a Tg <50°C, and the dye is capable of interacting with the highly branched polymer.

17. A combination according to claim 16, wherein the receiver medium is in accordance with any one of claims 2 to 13.

18. A combination according to claim 16 or 17, wherein the dye has functional groups complementary to functional groups of the highly branched polymer.

19. A combination according to claim 16, 17 or 18, wherein the highly branched polymer and dye are capable of interacting by acid-base reaction.

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